

STATE ROUTE



# Transportation Concept Report

Office of System Planning · District 6 · October 2006



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***Cover Photos:***

*Background Photo - Route 145 - Fresno County PM 1.50  
(Segment 1)*

*Top Right Photo - Route 145 - Madera County PM 24.50  
(Segment 16)*

*Center Right Photo - Route 145 - Madera County PM 9.25  
City of Madera (Segment 12)*

*Bottom Right Photo - Route 145 - Fresno County PM 35.10  
City of Kerman (Segment 6)*



STATE ROUTE



District 6

# Transportation Concept Report

Office of System Planning

October 2006



**Caltrans**

## Approval Recommended:

A handwritten signature in dark ink, appearing to read "D. Alan McCuen".

**D. Alan McCuen**  
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10/31/06  
Date

A handwritten signature in dark ink, appearing to read "Malcolm X. Dougherty".

**Malcolm X. Dougherty**  
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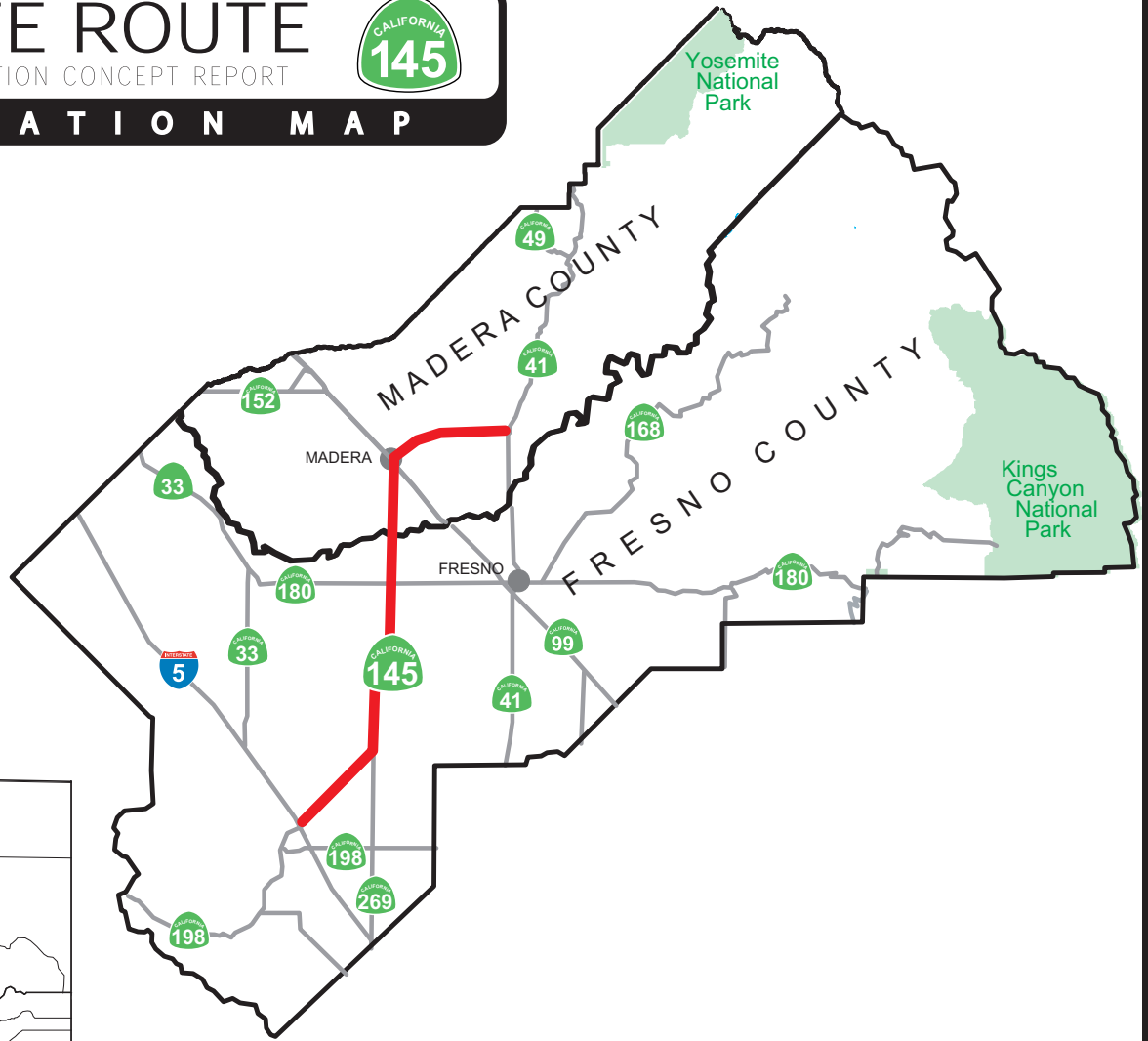
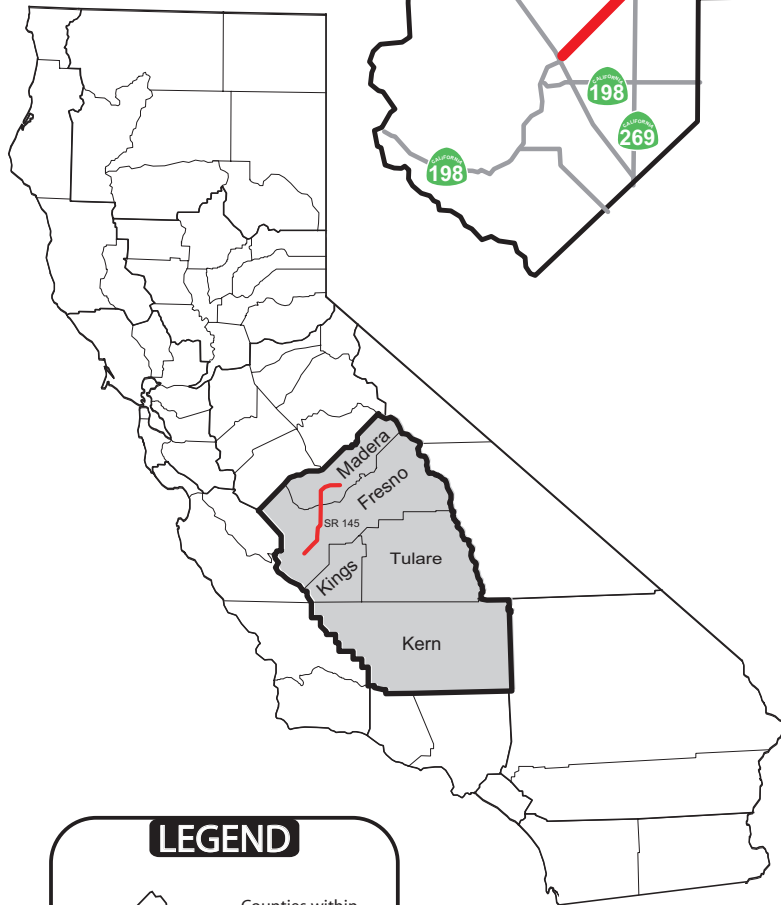
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Date

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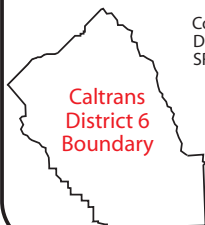
# STATE ROUTE

TRANSPORTATION CONCEPT REPORT

## LOCATION MAP



### LEGEND



Counties within  
District 6 which  
SR 145 traverses



Not To Scale

# Transportation Concept Report

## State Route 145

### October 2006

## I. INTRODUCTION

The Transportation Concept Report (TCR) is a long-range system planning document that establishes a planning concept for the corridor through the year 2030. The TCR provides route data and information, as well as current and projected (years 2006, 2015, and 2030, respectively) operating characteristics.

Considering reasonable financial and physical constraints, the TCR defines the appropriate Concept Level of Service (Concept LOS) and facility type(s) for each route. It also broadly identifies the nature and extent of improvements needed to attain the Concept LOS. Capacity-enhancing improvements, such as lane additions, are the primary focus for LOS attainment.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, or whichever LOS is feasible to attain. For the purpose of this document, however, the Concept LOS is a “target” LOS determined by the importance of the route and environmental factors. A deficiency (need for improvement) is triggered when the actual LOS falls below the Concept LOS.

The TCR also identifies transit, notably the High Speed Passenger Rail System, and the deployment of Intelligent Transportation Systems (ITS) as integral to route corridor development.

The Ultimate Transportation Corridor (UTC), or Ultimate Facility, as identified in this TCR, ensures that adequate right-of-way (ROW) is preserved for ultimate facility projects beyond 2030. However, the UTC does not consider funding as a constraint. Caltrans District 6 System Planning staff should be consulted for the interim ROW (prior to ultimate construction) for a specific location along the corridor. This document identifies the initial and conceptual planning phase that leads to subsequent programming and the project development process.

Consequently, the specific nature of proposed improvements, such as roadway width, number of lanes, and access control might change in later project development stages. Final determinations are normally made during the project report and design phases.

Therefore, a TCR is a “living document,” subject to amendments as conditions change and projects are completed. System Planning staff will update the TCR on a three-to-five year cycle or as needed.

The TCR for State Route 145 was prepared and completed by District 6 Office of System Planning staff in cooperation with local and regional agencies and other Caltrans functional units. As such, it will serve as a guide in cooperative planning and implementation of transportation and land use decisions.

## II. ROUTE DESCRIPTION AND PURPOSE

**Begins:** At Interstate 5, near Oilfields in Fresno County

**Ends:** At Route 41 (9 miles north of the City of Fresno) in Madera County.

Route 145 is approximately a 67-mile long highway located in Fresno and Madera Counties. Route 145 begins at Interstate 5, near Oilfields in Fresno County and ends at Route 41 in Madera County. The entire length of the route is located within District 6. Route 145 is predominantly a 2-lane conventional highway facility with a mix of 4-lane portions in Kerman and Madera urban corridors. It serves primarily agricultural traffic in the rural areas, and a mix of commuter and through traffic in the urban areas.

At the beginning of the document (Location Map, page “i”) is a map showing the location of Route 145 within District 6.

**Land Use:** The predominant land use along the Route 145 corridor is crop production and grazing. As the route passes through the communities of Five Points and Helm, residences and businesses are adjacent to it. In Kerman, the predominant land use along Route 145 is commercial. Route 145 through the City of Madera functions primarily as a commercial corridor, with existing commercial establishments being the predominant land use. The land is primarily residential west of Route 99 in the City of Madera and the eastern edge of the city.

**Terrain:** Generally flat, except at the beginning and end of the route where it is rolling.

### A. Modal Alternatives

**Passenger Rail Service:** The Burlington Northern and Santa Fe tracks cross over Route 145 in Madera County at PM 15.12 but otherwise does not impact this route. A small Amtrak station is currently located on Storey Road/Avenue 15½ just south of Route 145 in east Madera. However, this existing Amtrak station is being relocated to Road 26 and the tracks. From this station Amtrak, via its six daily San Joaquin Route trains, provides passenger rail service to and from the City of Madera.

**Transit Services:** Transit services are provided along portions of Route 145 in both Fresno and Madera Counties. Within Fresno County, transit services are provided via a combination of Fresno County Rural Transit Agency’s (FCRTA) Coalinga Transit Route (which uses a portion of Segment 1 between Butte Ave [Fresno PM 8.92], and Five Points/Mt. Whitney Avenue [Fresno PM 13.20]), and FCRTA’s San Joaquin Transit Route (which traverses Segments 5 and 6 between American Avenue [Fresno PM 30.10] and Route 180 in Kerman [Fresno PM 35.10]). Kerman Transit also operates a dial-a-ride service within the City of Kerman that may, as needed, use a portion of this route while providing its local transit services.

Within Madera County transit services are provided along portions of Route 145 via a combination of the Madera Area Express (MAX), the Madera County Connection (MCC) and Madera’s Dial-a-Ride (DAR) service. Within the City of Madera MAX uses portions of Route 145 (i.e. Madera and Yosemite Avenues within Segments 11, 12, 13 and 14), MCC uses Route 145 between the City of Madera and the Route’s end at Route 41 (i.e. Segments 13, 14, 15 and 16), and Madera’s DAR uses Route 145 in and around the City of Madera area as needed for its dial-a-ride services. Outside of the City of Madera, MCC provides services along Route 145 to the

junction of Route 41; transit services on Route 41 are provided to Coarsegold, Oakhurst and Bass Lake.

Greyhound Bus Lines provides regional transit services from within the City of Madera to points north and south, but does not use any portion of Route 145 as a part of its route.

*For a segment by segment list of specific transit providers, please see the Transit Services chart in the Appendix at the end of this TCR.*

**High Speed Rail:** The California High Speed Rail Authority (CHSRA) has developed a plan to build a high-speed rail line from San Diego to San Francisco. Electric-powered, high-speed trains could be operated at speeds up to 200 mph, allowing for travel from downtown San Francisco to Los Angeles in approximately 2 1/2 hours.

The proposed 700-mile-long system would stretch from San Francisco, Oakland, and Sacramento in the north, through the Central Valley, and to the south through Los Angeles, and San Diego.

Should the CHSRA choose the Grapevine route alignment (instead of the currently proposed Palmdale/Lancaster/Tehachapi route), it may parallel I-5 and SR 99. The high-speed rail line would connect to the State's existing transportation network with station links to airports, intercity rail and bus lines, commuter rail, and urban rail transit lines. This will directly benefit all motorists with traffic reductions and will help improve travel times.

**Bicycle Routes/Facilities:** From its beginning at Interstate 5 (Fresno PM 0.0) in southwestern Fresno County to its terminus in Madera County at SR 41 (Madera PM 25.5), Route 145 is comprised solely of conventional two- and four-lane highway segments all of which are open to bicycle travel. As is true of many state highways, much of this route has wide rideable shoulders while other portions have minimal shoulders.

Within Fresno County's General Plan - Part 3 - "Transportation and Circulation Element", the entire length of this Route is listed as a "Existing or Planned Bikeway". Within the Madera County 2004 Regional Bicycle Transportation Plan Route 145 is listed as a "Road of Regional Significance" whereupon the "...county is committed to upgrading the facilities as road reconstruction projects occur to provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders makes it practical to do so."

*Please refer to the "Bicycle Routes/Facilities" section of the Appendix for more detailed information on bicycle facilities along Route 145.*

**Pedestrian Access/Facilities:** Pedestrian and Americans With Disabilities Act (ADA) compliance concerns for this route are to be found primarily within the Cities of Kerman and Madera where there are currently moderate concentrations of residential, retail and commercial properties adjacent to this Route's right-of-way. The remainder of this route is very rural with few, if any, current pedestrian or ADA concerns. However, any project constructed along this route's right-of-way could change this status and require the installation of appropriate ADA facilities such as crosswalks, sidewalks, curb cuts, ramps, railings etc.

*Please refer to the "Pedestrian Access/Facilities" section of the Appendix for more detailed information on pedestrian and ADA access along Route 145.*



## B. Intelligent Transportation Systems

Route 145 has one existing and several proposed Changeable Message Signs (CMS). There are two proposed Highway Advisory Radios (HAR) near the junctions with Routes 269 and 180. Another application of ITS along this corridor is the deployment of Weather Stations at the San Joaquin River bridge (Avenue 5 ½).

Additionally, the 511 system is a new three-digit phone number program to access travel information that is being implemented throughout various areas of the country. Caltrans Reverse Commute Study/Special Studies Branch is working with Traffic Operations and Caltrans' Districts to develop a "California 511 Strategic Deployment Plan for Rural and Inter-Regional Traveler Information System" to meet the traveler's highway and transit information needs. Communication lines will be enhanced by the fiber optic network planned along the Route 99 corridor. Implementation status information is located in the ITS chart in the Appendix.

When fully implemented, 511 would be an easy to remember telephone number that can be accessed by travelers before and during their trip to obtain information about State highways, local roads, local transit, and State and local trains. At this time, the 511 system is not available in the Central Valley.

Deployment of ITS technology will enhance operational and safety efficiency of the route by informing motorists of traffic congestion, inclement weather, such as fog, highway construction, and/or closings.

The Caltrans Central Valley Transportation Management Center (TMC) monitors specific traffic locations from its headquarters at the District Office in Fresno.

## C. Highway Facts

- Formerly known as Route 126, the portion from Route 180 to Route 41 was added to the State Highway System in 1933. The portion from Interstate 5 to Route 180 was added to the System in 1970. The entire route was added to the California Freeway and Expressway System in 1959.
- The route is a 67-mile highway with an Annual Average Daily Traffic (AADT) ranging from as low as 5,200 to as high as 18,400, with trucks constituting up to 40 percent of the AADT.
- The primary purpose of the rural portions of Route 145 is serving agricultural traffic, while in the urban corridors it serves a mix of commuter and through traffic.
- It serves as a "main street" in the Cities of Kerman and Madera providing access to businesses, residential roads and other nearby properties. It is also an important arterial roadway for circulation in these cities.
- Route 145 provides a connection for recreational traffic from the western San Joaquin valley region to Millerton Lake and Yosemite National Park. It also provides access to the coast via Route 41, and Southern California via Interstate 5 for the valley residents.

- It is in the California Freeway and Expressway System and is a Federal-Aid Primary route functionally classified as a Minor Arterial, except for a 3-mile stretch through the City of Madera where it is classified as Principal Arterial.
- Designated as State Highway Terminal Access Route for larger trucks under the Federal Surface Transportation Assistance Act of 1982 (STAA).
- An adopted freeway agreement exists from Route 180 in Fresno County to 0.2 miles north of Avenue of 5 ½ in Madera County.

## D. Specific Environmental Considerations

Sensitive biological species potentially occurring along Route 145 include the following special-status flora and fauna. The flora include the Succulent owl's clover, palmate-bracted bird's beak, San Joaquin woollythreads, San Joaquin Valley orcutt grass, hairy orcutt grass, and Green's tuctoria. The fauna include the San Joaquin kit fox, Vernal pool fairy shrimp, valley elderberry longhorn beetle, Swainson's hawk, giant garter snake, blunt-nosed leopard, and California tiger salamander.

In addition, historical and archeological sites are located along the route in unspecified area. These sites are monitored by the Caltrans Cultural Resources staff and Native American consultants and are subject to consideration under State and Federal laws related to cultural resources management. Environmental considerations to improvements on the route include the California Aqueduct, oil land, and commercial and residential developments in existence along the route.

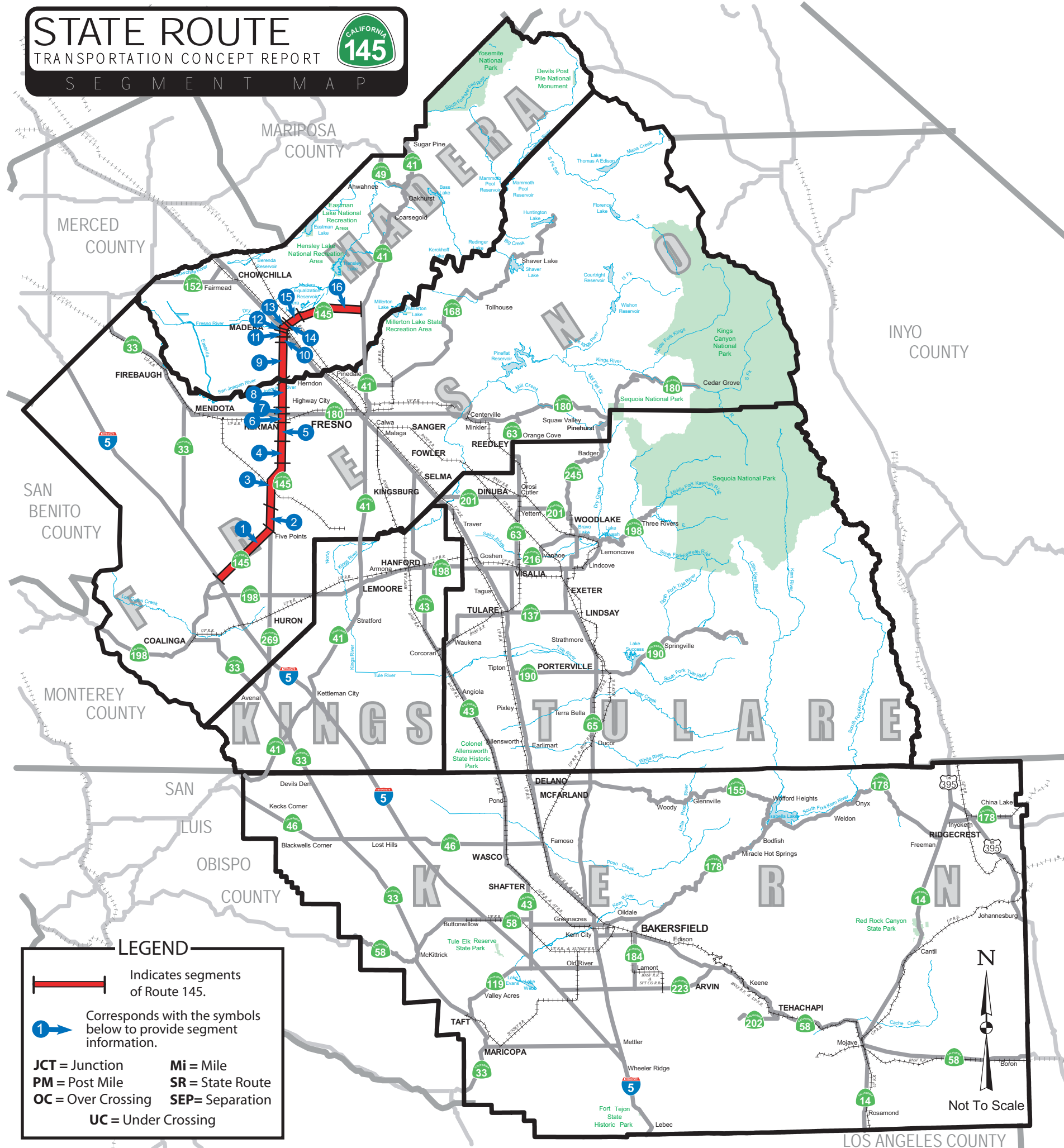
## III. Segment Map

On the following page is an 11x17" foldout TCR Segment Map for Route 145. This map shows the 16 segments of SR 145 in Fresno and Madera Counties.

Following the segment map an overview of Route 145 geometrics (including segment detail maps), land use and environmental considerations. The overview is split into six segment groups.

*See the attached Segment Map on the following page*

# SEGMENT MAP



## **Madera County**

- 1 **Segment 1:** SR 145 PM 0.0 / 13.2  
S JCT RTE I-5 / RTE 269 SEP
  - 2 **Segment 2:** SR 145 PM 13.2 / 17.3  
RTE 269 SEP / Elkhorn Ave
  - 3 **Segment 3:** SR 145 PM 17.3 / 26.1  
Elkhorn Ave / Manning Ave
  - 4 **Segment 4:** SR 145 PM 26.1 / 30.1  
Manning Ave / American Ave
  - 5 **Segment 5:** SR 145 PM 30.1 / 33.6  
American Ave / Church Ave
  - 6 **Segment 6:** SR 145 PM 33.6 / 35.1  
Church Ave / RTE 180
  - 7 **Segment 7:** SR 145 PM 35.1 / 36.2  
RTE 180 / Belmont Ave
  - 8 **Segment 8:** SR 145 PM 36.2 / R41.3  
Belmont Ave / Fresno/Madera Co Line
  - 9 **Segment 9:** SR 145 PM R0.0 / 7.1  
Fresno/Madera Co Line / Avenue 12
  - 10 **Segment 10:** SR 145 PM 7.1 / 8.1  
Avenue 12 / Avenue 13
  - 11 **Segment 11:** SR 145 PM 8.1 / 9.1  
Avenue 13 / RTE 99
  - 12 **Segment 12:** SR 145 PM 9.1 / 9.7  
RTE 99 / Yosemite Ave
  - 13 **Segment 13:** SR 145 PM 9.7 / 10.7  
Yosemite Ave / Fig Ave
  - 14 **Segment 14:** SR 145 PM 10.7 / 11.0  
Fig Ave / Tozer St
  - 15 **Segment 15:** SR 145 PM 11.0 / 13.7  
Tozer St / Road 400
  - 16 **Segment 16:** SR 145 PM 13.7 / 25.5  
Road 400 / RTE 41

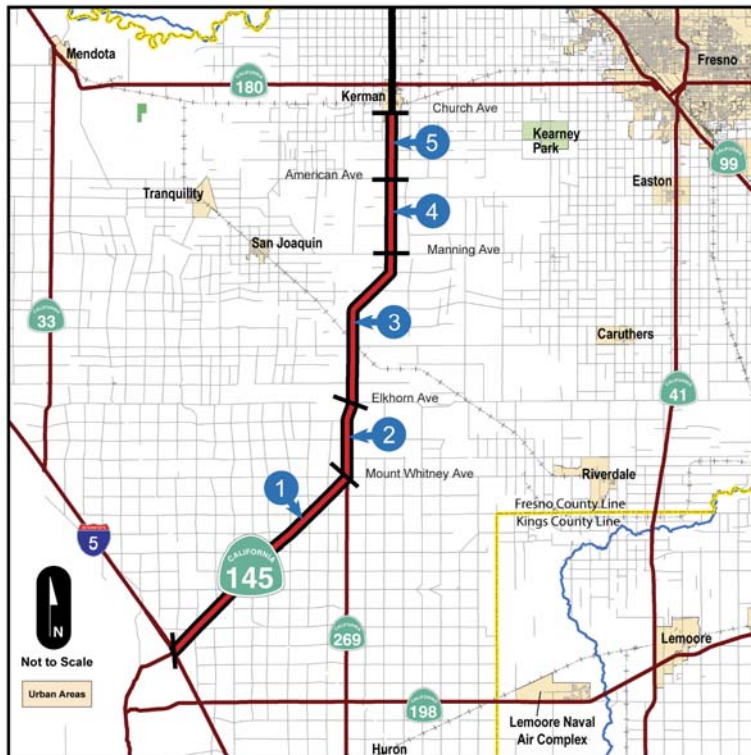
## IV. Geometrics, Land Use, and Environmental Considerations

### *Segments 1-5: Interstate 5 to Church Avenue*

**Begins:** At Interstate 5

**Ends:** At Church Avenue

**Land Use:** Along this segment are the rural towns of Five Points and Helm. The segment begins with rolling hills and becomes flat near Route 269. Land use consists of rural residential, agricultural lands, agri-business and rangeland. The highway crosses the California Aqueduct at Post Mile (PM) 3.10. A few oil wells with related storage tanks and facilities exist alongside the route.



**Facility:** This portion of Route 145 is mainly a 2-lane conventional highway with striped median. The Route Concept calls for Route 145 to be a 2-lane conventional highway with improvements between Interstate 5 and Church Avenue.

*Interchange(s) and other State Highway connections:*

- Interchange with Interstate 5.
- Intersection with Route 269.

**Environmental/Historical Resources:** The highway transverse through agricultural land, south of the city of Kerman. There is scattered development,

principally Five Points and Helm. The primary environmental issue in this segment revolves around threatened and endangered species, e.g. San Joaquin kit fox

### *Segment 6: Church Avenue to State Route 180*

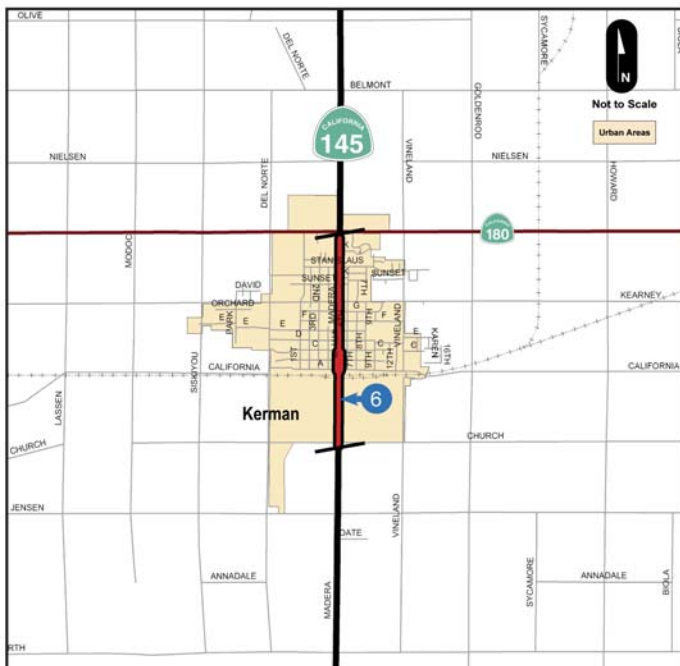
**Begins:** At Church Avenue in Kerman

**Ends:** At State Route 180

**Land Use:** This segment is within the City of Kerman and the predominant land use is commercial activities with a mix of residential.

**Facility:** The existing facility is a 4-lane urban conventional highway that functions as the “main street” for the City of Kerman. Part of the median in the City of Kerman is raised and functions as a recreational parkway. The route concept for this segment calls for the highway to remain a 4-lane conventional highway facility.





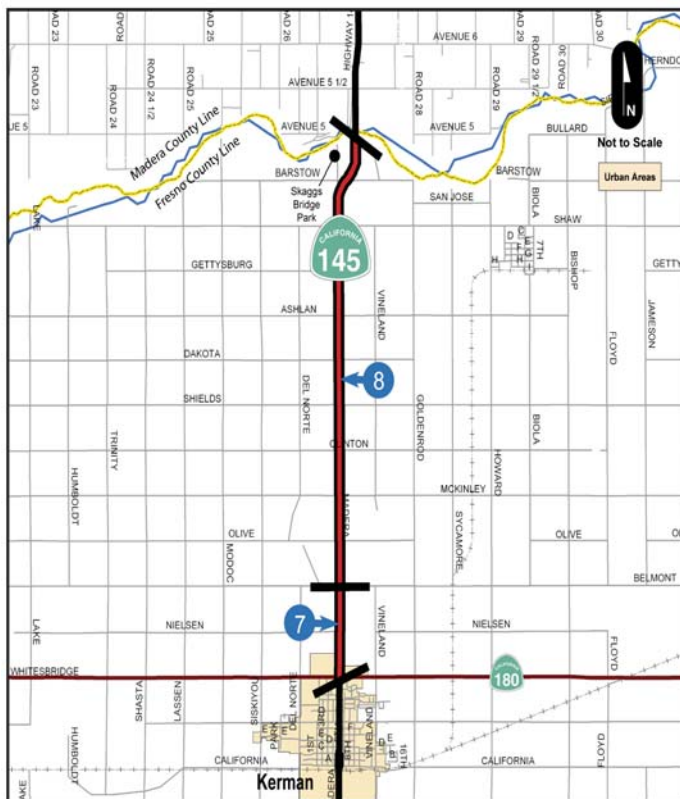
*Interchange(s) and other State Highway connections:*

- Intersection with Route 180.
- **Environmental/Historical Resources:** Route 145 passes through the City of Kerman. Hazardous waste issues predominate in this segment. Underground storage tanks have been discovered in the right of way, and it is probable there are undiscovered tanks present.
- Properties potentially eligible for the California or National Registers of Historic Places may exist.

### *Segments 7-8: State Route 180 to Fresno/Madera County Line*

**Begins:** At State Route 180

**Ends:** At Fresno/Madera County Line



**Land Use:** The predominant land uses are agriculture (crop production) and rural residential.

**Facility:** This is a 2-lane conventional highway located entirely in a flat terrain. Lane width is consistently 12 feet with striped median. For Segment 7, a raised median will be placed as the land adjacent to the highway is developed.

**Environmental/Historical Resources:** The highway passes through agricultural lands and scattered crossroad development. The major environmental issues are focused at the San Joaquin River crossing. There is a public-owned park near the highway at the river. Water quality associated with storm water drainage is another potential issue at the river.

**Segments 9-10: From Fresno/Madera County Line to Avenue 13**

**Begins:** Fresno/Madera County Line

**Ends:** At Avenue 13 in City of Madera

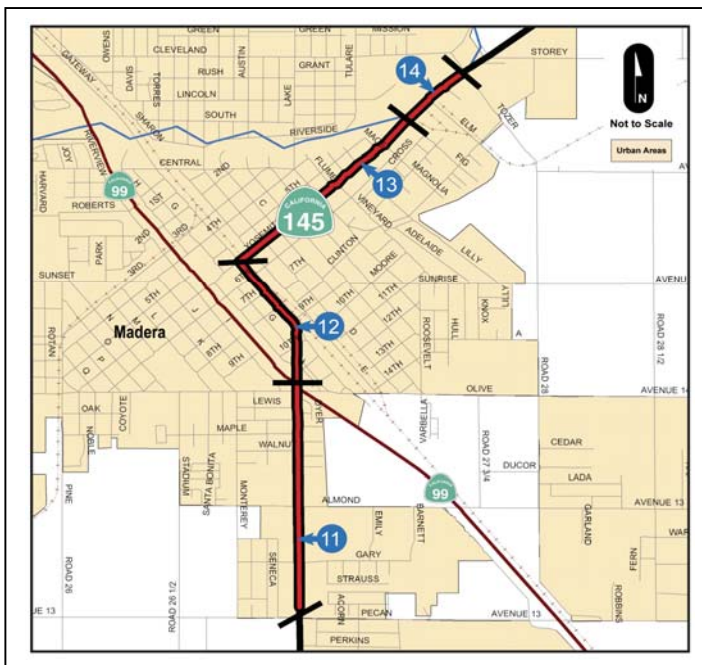


**Land Use:** Predominantly consists of agriculture, but as it approaches Avenue 12, the land use transitions to a mix of residential and commercial activities. This urban transition will intensify in the future given that the City of Madera's urban boundary now starts from Avenue 12.

**Facility:** This is a two-lane conventional highway with striped median in flat terrain.

**Environmental/Historical Resources:** The highway passes through agricultural land and scattered crossroad development. Threatened and endangered species and wetland issues at the water crossings are the primary environmental issues in this segment.

**Segments 11-14: From Avenue 13 to Tozer Street (City of Madera)**



**Begins:** At Avenue 13 in the City of Madera

**Ends:** At Tozer Street in City of Madera

**Land Use:** Segments 11-14 consists of urban land in the City of Madera, with mixed land uses consisting of residential, commercial, and industrial facilities.

**Facility:** The highway alternates between a 2-lane and a 4-lane facility with a mix of raised and striped median as it traverses the City of Madera. Some portions of the highway that serve as "main street" are striped for street automobile parking.

*Interchange(s) and other State Highway connections:*

- Interchange connection at Route 99.

**Environmental/Historical Resources:** Route 145 passes through the City of Madera. The primary environmental issue is the built environment. Two historic properties lie adjacent to the highway; there may be others not yet identified.

**Segments 15-16: From Tozer Street (City of Madera) to Route 41**

**Begins:** At Tozer Street in City of Madera

**Ends:** At the Junction with Route 41



**Land Use:** This stretch of highway 145 traverses agriculture land with some rural residential.

**Facility:** This is a 2-lane conventional highway that starts off on a flat terrain but transitions into rolling terrain. Lane width is a mix of 11 feet and 12 feet with striped median. There is a Park-and-Ride facility at the junction with Route 41.

*Interchange(s) and other State Highway connection(s):*

- Intersection at Route 41

**Environmental/Historical Resources:** The highway passes through grazing land. There is scattered development present. The primary environmental issue centers around wetlands (vernal pools). Vernal pools are also habitat for listed species. Archaeological sites have also been found in this segment.

## V. Concept Rationale

### Route Concept LOS:

The Route Concept Level of Service (LOS) assigned for this route is for the daily peak travel periods when traffic volumes are highest. Route Concept LOS "D" is assigned to the entire length of Route 145.

**Urban:** The urban areas of Kerman and Madera, and the growth area along segment 15 have relatively high traffic volumes and urban characteristics. This level of service considers the cost effectiveness for the urban travel environment.

**Rural:** The rest of Route 145 is assigned Route Concept LOS “D” because it is a rural Minor Arterial that mainly serves local travel demand.

**Concept Facility:** The Concept Facility for Route 145 ranges from 2-lane improved conventional highway or 4-lane conventional highway throughout District 6. Specifically, the following list shows the facility for the year 2030, beginning with the segment at the Route 145/Interstate 5 Junction and proceeding northward to the Route 145/41 Intersection.

- **2-lane improved conventional highway (Segments 1-5):** The highway will remain a 2-lane conventional highway.
- **4-lane conventional highway (Segment 6):** The existing highway will remain a 4-lane conventional highway.
- **4-lane conventional highway (Segments 7-10):** Widen from an existing 2-lane conventional highway facility to a 4-lane conventional highway.
- **4-lane conventional highway (Segment 11):** Widen an existing 2-lane conventional highway portion of this segment to a 4-lane conventional highway.
- **4-lane conventional highway (Segment 12):** Widen from an existing 2-lane conventional highway facility to a 4-lane conventional highway.
- **4-lane conventional highway (Segment 13):** The existing highway will remain a 4-lane conventional highway.
- **4-lane conventional highway (Segment 14):** Widen from an existing 2-lane conventional highway facility to a 4-lane conventional highway.
- **2-lane improved conventional highway (Segments 15-16):** The highway will remain a 2-lane conventional highway.

The Ultimate Facility beyond 25 years is planned to be a 4-lane conventional highway from Interstate 5 to Tozer Street, and a 2-lane improved conventional highway from Tozer Street to the junction with Route 41.

## VI. State Route 145 Transportation Concept Report Summary Chart

The Summary Charts on the following four pages indicate that SR 145 is divided into 16 distinct segments that provide descriptive and technical information, both current and forecast, for the State highway. It also has a linear geographic diagram that illustrates the major State and local highway facilities, along with key natural features and City/County boundaries, current highway geometrics, i.e., conventional highway, expressway, and freeway.

A “Chart Explanation” bar defines what is shown on the Chart with the exception of self-explanatory technical information. The Summary Chart also delineates functional classification, various highway designations, environmental information, and general plan information.

*See the following four pages for the Summary Chart.*





LEGEND

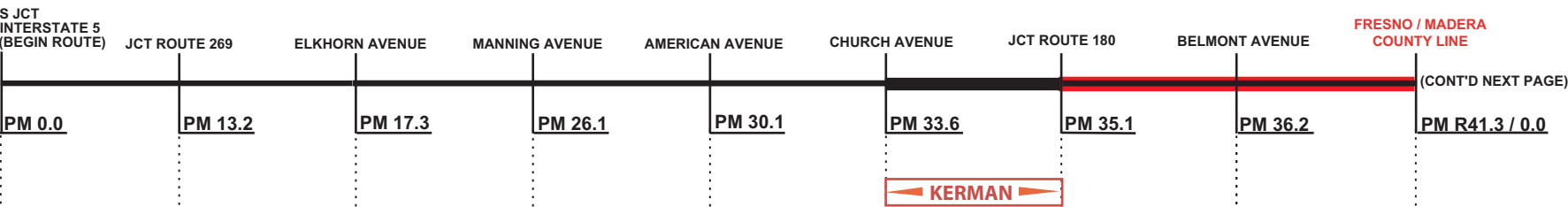
**Existing Lanes**

Conventional

**Planned or Programmed by 2030**

Add Through Lanes

\* Length of Segments on this bar chart are Not To Scale



**Segment:** Is self-explanatory:

**Rural/Urban:** Indicates whether the segment is in a rural area or city limits.

**Terrain:** Shows the general highway grade: minimal grade = level; moderate grade = rolling; and severe grade = mountainous.

**ROW:** Portrays Right-of-Way (ROW) and geometric data in feet.

**Shoulder Range:** Is a range of treated surface (8' standard), both inside and outside shoulders.

**Ultimate (UTC):** Is the typical ROW needed for the ultimate facility, i.e., 8 lane freeway (8F) 218' is the standard typical UTC ROW - will be updated upon corridor plan lining by specific sections of highway.

**Facility:** Shows the Existing Facility, the desired facility type (2030 Concept) by 2030-RTPA's and Caltrans, and the Ultimate Facility to preserve ROW and plan line beyond 2030. It also shows whether a passing lane exists. 2C(I) indicates that the highway has been improved in select locations with operational or safety improvements. Examples are: passing lanes, channelization and traffic signals.

**LOS:** The current (2006) LOS (level of service), along with the expected calculated LOS in 2015 and 2030. The 2030 Concept is the target LOS desired, i.e., LOS C, for attainment by 2030 Caltrans.

**Deficiency:** Occurs when the target LOS is degraded, i.e., LOS D worse than LOS C, with the year of occurrence shown. It also shows whether a capacity improving project is in the STIP, and what the LOS would be with the 2030 Concept improvement.

**Directional Split:** Denotes the split in peak hour traffic flow on a directional basis (NB/SB or WB/EB) either in the morning (AM) or evening (PM).

**AAADT:** Signifies Annual Average Daily Traffic.

**Peak Hour:** Indicates a representation of the maximum hour of traffic flow during the day.

**% Trucks:** Shows the percent of trucks for AAADT and Peak Hour.

**(I)++:** 2-lane conventional highway with (I) improvements i.e. turn lanes, signals, passing lanes etc.

**N/A:** Not Applicable or not deficient

**N/A\*:** Deficient but no project(s) recommended

**\*:** Concept Facility meets Concept LOS

**\*\*:** Concept Facility does not meet Concept LOS

**99 P^:** Median width 100' or greater with or without variance.

**±:** Ultimate ROW is generally the same as the existing ROW.

SEGMENT	1	2	3	4	5	6	7	8
County / Route	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145
Description Begin	S JUNCTION ROUTE 5	ROUTE 269	ELKHORN AVENUE	MANNING AVENUE	AMERICAN AVENUE	CHURCH AVENUE	ROUTE 180	BELMONT AVENUE
Description End	ROUTE 269	ELKHORN AVENUE	MANNING AVENUE	AMERICAN AVENUE	CHURCH AVENUE	ROUTE 180	BELMONT AVENUE	FRESNO / MADERA CO LINE
Postmile Limits Begin/End	0/0 / 13.2	13.2 / 17.3	17.3 / 26.1	26.1 / 30/1	30.1 / 33.6	33.6 / 35.1	35.1 / 36.2	36.2 / R41.3
Length (MI)	13.2	4.1	8.8	4.0	3.5	1.5	1.1	5.1
Rural or Urban	RURAL	RURAL	RURAL	RURAL	RURAL	URBAN	RURAL	RURAL
Terrain	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT
ROW: Range Existing (FT)	60.0 / 100.00	60.0 / 80.0	80.0 / 100.0	60.0 / 60.0	60.0 / 80.0	60.0 / 80.0	65.0 / 80.0	50.0 / 142.0
Median Range (FT)	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 99.0 P^	0.0 / 0.0	0.0 / 12.0
Shoulder Range (FT)	4.0 / 8.0	8.0 / 8.0	0.0 / 8.0	2.0 / 8.0	8.0 / 8.0	2.0 / 10.0	0.0 / 0.0	0.0 / 8.0
Lane Width (FT)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Ultimate ROW (FT)	146.0	146.0	146.0	146.0	146.0	110.0	110.0	146.0
Facility: Existing	2C	2C	2C	2C	2C	4C	2C	2C
2030 Concept	2C(I)++	2C(I)++	2C(I)++	2C(I)++	2C(I)++	4C	4C	4C
UTC	4C	4C	4C	4C	4C	4C	4C	4C
LOS: 2006	C	C	C	B	C	C	D	C
LOS: 2015	D	C	D	B	C	C	D	D
LOS: 2030	D	D	D	C	D	C	E	E
LOS: 2030 Concept	D	D	D	D	D	D	D	D
Deficiency/Year Deficient	N/A	N/A	N/A	N/A	N/A	N/A	2030	2030
Project in STIP/RTP (Y/N)	NO	NO	NO	NO	NO	NO	YES	YES
LOS W/ Concept Improvement	N/A	N/A	N/A	N/A	N/A	N/A	B*	B*
Directional Split (Peak Hour)	60 / 40	57 / 43	55 / 45	50 / 50	53 / 47	54 / 46	55 / 45	56 / 44
AAADT: 2006	5,200	6,700	8,100	6,800	8,600	16,000	10,500	8,600
AAADT: 2015	6,100	8,600	10,400	8,600	11,200	21,200	15,700	12,800
AAADT: 2030	7,200	11,000	13,400	10,800	14,600	28,300	23,500	19,000
Peak Hour: 2006	640	740	900	560	710	1,300	870	710
Peak Hour: 2015	800	1,000	1,200	700	900	1,700	1,300	1,100
Peak Hour: 2030	900	1,200	1,500	900	1,200	2,300	1,900	1,600
% Trucks: AAADT	25%	35%	20%	18%	12%	12%	15%	16%
% Trucks: Peak Hour	20%	27%	15%	15%	6%	7%	8%	10%



LEGEND

**Existing Lanes**

Conventional

**Planned or Programmed by 2030**

Add Through Lanes

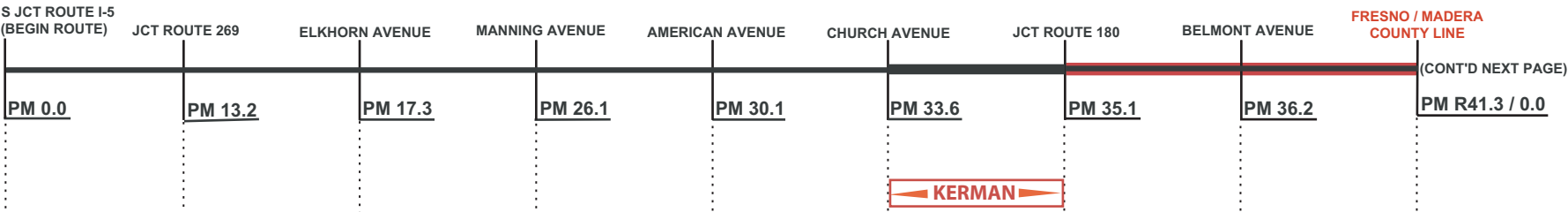
Number of Lanes

2

4

6

\* Length of Segments on this bar chart are Not To Scale



**Segment:** Is self-explanatory except for several data sets:

**Functional Classification:** A process by which streets and highways are grouped into or classification systems.

**NHS (National Highway System):** Included in the NHS is all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

**Freeway/Expressway System:** The Statewide system of highways declared to be essential to the future development of California.

**Regionally Significant:** Serves regional transportation needs including at a minimum all principal arterial highways and all fixed guideway transit facilities.

**STRAHNET:** A highway that provides defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.

**Lifeline:** A route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open.

**IRRS (Interregional Road System):** A series of State highway routes, outside the urbanized areas, that provide access to the State's economic centers, major recreational areas, and urban and rural regions.

**STAA (Surface Transportation Assistance Act):** This act required states to allow larger trucks on the National Network. "Terminal Access" routes are State highways that can accommodate STAA trucks. Other designations i.e., California Legal offer more limited access.

**Scenic:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers.

**ICES (Intermodal Corridor of Economic Significance):** Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

SEGMENT #	1	2	3	4	5	6	7	8
County / Route	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145	FRE / 145
Description Begin	S JUNCTION ROUTE 5	ROUTE 269	ELKHORN AVENUE	MANNING AVENUE	AMERICAN AVENUE	CHURCH AVENUE	ROUTE 180	BELMONT AVENUE
Description End	ROUTE 269	ELKHORN AVENUE	MANNING AVENUE	AMERICAN AVENUE	CHURCH AVENUE	ROUTE 180	BELMONT AVENUE	FRESNO / MADERA COUNTY LINE
Postmile Limits Begin/End	0.0 / 13.2	13.2 / 17.3	17.3 / 26.1	26.1 / 30.1	30.1 / 33.6	33.6 / 35.1	35.1 / 36.2	36.2 / 41.3
Lane Length (MI)	13.2	4.1	8.8	4.0	3.5	1.5	1.1	5.1
Functional Classification	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL
National Highway System (NHS) (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
Freeway/Expressway System (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES
Regionally Significant (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES
STRAHNET (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
Lifeline (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
IRRS (Yes: HE=High Emphasis, F=Focus, G=Gateway) or No	NO	NO	NO	NO	NO	NO	NO	NO
TRUCK NETWORK: STAA (NN=National Network, TA=Terminal Access) or CL=California Legal, R=Special Restrictions; A=Advisory	TA	TA	TA	TA	TA	TA	TA	TA
Scenic (Yes: OD=Officially Designated, E=Eligible) or No	NO	NO	NO	NO	NO	NO	NO	NO
ICES (Intermodal Corridor of Economic Significance) (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
General Plan/RTP LOS Standard	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System	Fresno Co LOS D For CMP & RTP Regionally Significant System	Fresno Co LOS C For CMP & RTP Regionally Significant System
General Plan/RTP Standard Highway Classification	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY
Bikes/Pedestrians Allowed (Y/N) (Y* = Bike Route/Lane in Roadway)	YES	YES	YES	YES	YES	YES	YES	YES



LEGEND

**Existing Lanes**

Conventional

**Planned or Programmed by 2030**

Add Through Lanes

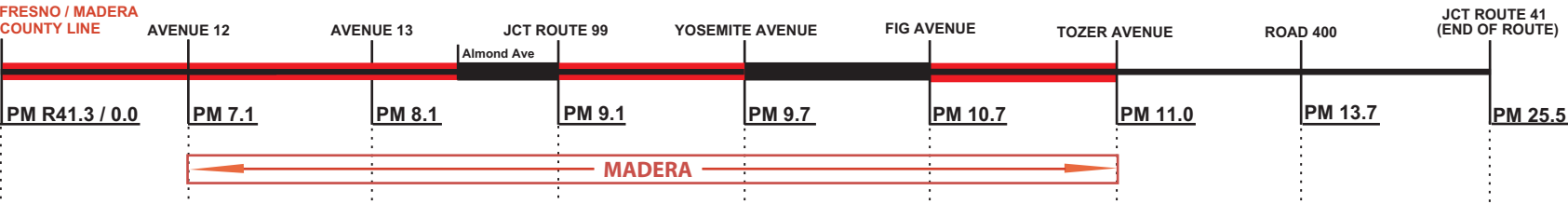
Number of Lanes

2

4

6

\* Length of Segments on this bar chart are Not To Scale



**Segment:** Is self-explanatory:

**Rural/Urban:** Indicates whether the segment is in a rural area or city limits.

**Terrain:** Shows the general highway grade: minimal grade = level; moderate grade = rolling; and severe grade = mountainous.

**ROW:** Portrays Right-of-Way (ROW) and geometric data in feet.

**Shoulder Range:** Is a range of treated surface (8' standard), both inside and outside shoulders.

**Ultimate (UTC):** Is the typical ROW needed for the ultimate facility, i.e., 8 lane freeway (8F) 218' is the standard typical UTC ROW - will be updated upon corridor plan lining by specific sections of highway.

**Facility:** Shows the Existing Facility, the desired facility type (2030 Concept) by 2030-RTPA's and Caltrans, and the Ultimate Facility to preserve ROW and plan line beyond 2030. It also shows whether a passing lane exists. 2C(I) indicates that the highway has been improved in select locations with operational or safety improvements. Examples are: passing lanes, channelization and traffic signals.

**LOS:** The current (2006) LOS (level of service), along with the expected calculated LOS in 2015 and 2030. The 2030 Concept is the target LOS desired, i.e., LOS C, for attainment by 2030 Caltrans.

**Deficiency:** Occurs when the target LOS is degraded, i.e., LOS D worse than LOS C, with the year of occurrence shown. It also shows whether a capacity improving project is in the STIP, and what the LOS would be with the 2030 Concept improvement.

**Directional Split:** Denotes the split in peak hour traffic flow on a directional basis (NB/SB or WB/EB) either in the morning (AM) or evening (PM).

**AADT:** Signifies Annual Average Daily Traffic.

**Peak Hour:** Indicates a representation of the maximum hour of traffic flow during the day.

**% Trucks:** Shows the percent of trucks for AADT and Peak Hour.

**(i)++:** 2-lane conventional highway with (i) improvements i.e. turn lanes, signals, passing lanes

**N/A:** Not Applicable or not deficient

**N/A\*:** Deficient but no project(s) recommended.

**\*:** Concept Facility meets Concept LOS.

**\*\*:** Concept Facility does not meet Concept LOS.

**99 PA:** Median width 100' or greater with or without variance.


**++:** Ultimate ROW is generally the same as existing ROW.

SEGMENT #	9	10	11	12	13	14	15	16
County / Route	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145
Description Begin	FRESNO/MADERA CO LINE	AVENUE 12	AVENUE 13	JCT ROUTE 99	YOSEMITE AVENUE	FIG AVENUE	TOZER STREET	ROAD 400
Description End	AVENUE 12	AVENUE 13	JCT ROUTE 99	YOSEMITE AVENUE	FIG AVENUE	TOZER STREET	ROAD 400	JCT ROUTE 41
Postmile Limits Begin/End	R0.0 / 7.1	7.1 / 8.1	8.1 / 9.1	9.1 / 9.7	9.7 / 10.7	10.7 / 11.0	11.0 / 13.7	13.7 / 25.5
Length (MI)	7.1	1.0	1.0	0.6	1.0	0.3	2.7	11.8
Rural or Urban	RURAL	URBAN	URBAN	URBAN	URBAN	URBAN	RURAL	RURAL
Terrain	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	ROLLING
ROW: Range Existing (FT)	45.0 / 135.0	60.0 / 135.0	63.0 / 90.0	100.0 / 100.0	60.0 / 100.0	60.0 / 120.0	80.0 / 100.0	80.0 / 100.0
Median Range (FT)	0.0 / 0.0	0.0 / 12.0	0.0 / 0.0	0.0 / 12.0	0.0 / 4.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
Shoulder Range (FT)	0.0 / 8.0	0.0 / 8.0	0.0 / 8.0	0.0 / 12.0	8.0 / 12.0	8.0 / 8.0	0.0 / 8.0	0.0 / 1.0
Lane Width (FT)	12.0	12.0	12.0	12.0	12.0	12.0	11.0 / 12.00	11.0
Ultimate ROW (FT)	+	110	110	100	100	110	110	146
Facility: Existing	2C	2C	2C/4C	2C	4C	2C	2C	2C
2030 Concept	4C	4C	4C	4C	4C	4C	2C(I)++	2C(I)++
UTC	4C	4C	4C	4C	4C	4C	4C	4C
LOS: 2006	C	D	C	E	C	C	C	C
LOS: 2015	D	E	C	E	D	E	E	C
LOS: 2030	E	E	E	F	E	F	F	F
LOS: 2030 Concept	D	D	D	D	D	D	D	D
Deficiency/Year Deficient	2030	2015	2030	2005	2030	2015	2015	2030
Project in STIP/RTP (Y/N)	YES	YES	YES	YES	YES	YES	NO	NO
LOS W/ Concept Improvement	B*	B*	B*	E**	D*	B*	N/A	N/A
Directional Split (Peak Hour)	52 / 48	53 / 47	50 / 50	54 / 46	54 / 46	57 / 43	56 / 44	56 / 44
AADT: 2006	8,000	11,200	18,000	18,100	18,400	11,600	5,900	6,100
AADT: 2015	11,900	17,700	28,500	28,200	29,100	16,800	11,100	11,000
AADT: 2030	17,700	28,000	45,000	43,800	45,600	24,400	20,700	19,500
Peak Hour: 2006	670	1,000	1,500	1,750	1,750	1,100	790	520
Peak Hour: 2015	1,000	1,600	2,400	2,700	2,800	1,600	1,500	900
Peak Hour: 2030	1,500	2,500	3,800	4,200	4,300	2,300	2,800	1,700
% Trucks: AADT	20%	13%	7%	7%	7%	7%	8%	10%
% Trucks: Peak Hour	17%	10%	6%	5%	5%	3%	6%	8%

LEGEND


**Existing Lanes**

Conventional






**Planned or Programmed by 2030**

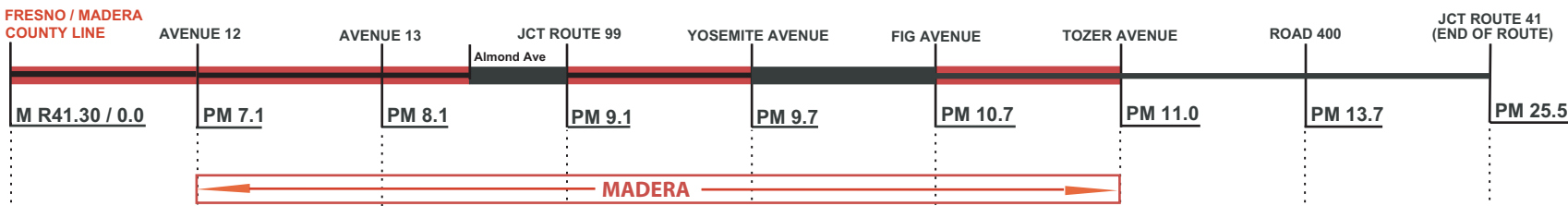
Add Through Lanes



Number of Lanes

 2  
 4  
 6

\* Length of Segments on this bar chart are Not To Scale



**Segment:** Is self-explanatory except for several data sets:

**Functional Classification:** A process by which streets and highways are grouped into or classification systems.

**NHS (National Highway System):** Included in the NHS is all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

**Freeway/Expressway System:** The Statewide system of highways declared to be essential to the future development of California.

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**STRAHNET:** A highway that provides defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.

**Lifeline:** A route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open.

**IRRS (Interregional Road System):** A series of State highway routes, outside the urbanized areas, that provide access to the State's economic centers, major recreational areas, and urban and rural regions.

**STAA (Surface Transportation Assistance Act):** This act required states to allow larger trucks on the National Network. "Terminal Access" routes are State highways that can accommodate STAA trucks. Other designations i.e., California Legal offer more limited access.

**Scenic:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers.

**ICES (Intermodal Corridor of Economic Significance):** Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

SEGMENT #	9	10	11	12	13	14	15	16
County / Route	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145	MAD / 145
Description Begin	FRESNO / MADERA CO LINE	AVENUE 12	AVENUE 13	JCT ROUTE 99	YOSEMITE AVENUE	FIG AVENUE	TOZER STREET	ROAD 400
Description End	AVENUE 12	AVENUE 13	JCT ROUTE 99	YOSEMITE AVENUE	FIG AVENUE	TOZER STREET	ROAD 400	JCT ROUTE 41
Postmile Limits Begin/End	0.0 / 7.1	7.1 / 8.1	8.1 / 9.1	9.1 / 9.7	9.7 / 10.7	10.7 / 11.0	11.0 / 13.7	13.7 / 25.5
Lane Length (MI)	7.1	1.0	1.0	0.6	1.0	0.3	2.7	11.8
Functional Classification	MINOR ARTERIAL	MINOR ARTERIAL	PRINCIPAL ARTERIAL (EXTENSION OF MINOR ARTERIAL-RURAL TO URBAN)	PRINCIPAL ARTERIAL (EXTENSION OF MINOR ARTERIAL-RURAL TO URBAN)	PRINCIPAL ARTERIAL (EXTENSION OF MINOR ARTERIAL-RURAL TO URBAN)	PRINCIPAL ARTERIAL (EXTENSION OF MINOR ARTERIAL-RURAL TO URBAN)	MINOR ARTERIAL	MINOR ARTERIAL
National Highway System (NHS) (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
Freeway/Expressway System (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES
Regionally Significant (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES
STRAHNET (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
Lifeline (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
IRRS (Yes: HE=High Emphasis, F=Focus, G=Gateway) or No	NO	NO	NO	NO	NO	NO	NO	NO
TRUCK NETWORK: STAA (NN=National Network, TA=Terminal Access) or CL=California Legal, R=Special Restrictions; A=Advisory	TA	TA	TA	TA	TA	TA	TA	TA
Scenic (Yes: OD=Officially Designated, E=Eligible) or No	NO	NO	NO	NO	NO	NO	NO	NO
ICES (Intermodal Corridor of Economic Significance) (Y/N)	NO	NO	NO	NO	NO	NO	NO	NO
General Plan/RTP LOS Standard	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System	Madera Co LOS C for RTP Regionally Significant System
General Plan/RTP Standard Highway Classification	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY	EXPRESSWAY
Bikes/Pedestrians Allowed (Y/N) (Y* = Bike Route/Lane in Roadway)	YES	YES	YES	YES	YES	YES	YES	YES



## VII. A Review of Route 145 Performance: Current and Future

A comparison of the current and future operating traffic LOS to the designated Route Concept LOS is a way of measuring the existing and future performance levels on a State highway. For purposes of this review, a segment on Route 145 is deficient when it operates below the designated Route Concept LOS of D.

As of the year 2006, Route 145 is operating at LOS D or better for most of its entirety. The segments within the urban boundaries of Madera are operating at mostly LOS C except for Segment 12 - near the junction with Route 99, which is operating at LOS E.

By the year 2030, the LOS will deteriorate in some segments due to increased traffic as a result of growth along this corridor and changes in land use designations by local jurisdictions. The route will operate mostly at LOS E or F from the junction with Route 180 to the end of the route at the junction with Route 41 by the year 2030. Segments 7 through 11, 13 and 16 will operate at LOS E, while Segments 12, 14 and 15 will operate at LOS F.

These identified deficient segments should continue to meet their designated Route Concept LOS D through 2030 with planned improvements. The exception will be Segment 12 that will still be deficient even with improvement to a 4-lane conventional highway. This deficiency will be as a result of increased travel demand and lack of adequate capacity. Apart from being urbanized, this segment also provides access for traffic bound for Route 99.

This deficiency can't be remedied by further widening to 6-lane highway because of the restrictive nature of right-of-way (80-feet) within downtown Madera. A different strategy will be needed to attain the concept LOS D given the downtown conditions. In downtown Madera, Route 145 functions as the community main street – serving pedestrians, bicyclists, businesses and public transit. It supports economic growth and gives character and identity to the community.

Future highway improvements along Madera urban corridor will require flexibility – balancing community needs with public safety concerns. Further highway improvements beyond the 4-lane facility will be limited to re-striping, signal synchronization, on-street parking reconfigurations, lower speed limits and the like.

There were past discussions on realigning Route 145 around the downtown, but there have been no recent proposals. Also, there were past efforts and discussions about the State relinquishing a portion of the route within downtown Madera to the City of Madera. The legislative initiative was locally sponsored and largely driven by efforts on the part of the city to have more flexibility and responsibility for decisions on the portion of the route that serves as main street for downtown Madera.

Another strategy to optimize mobility along this route will be Caltrans efforts to employ ITS improvements such as changeable message signs, highway advisory radio and roadway weather information systems to improve efficiency and traveler safety. This will be in addition to the regular maintenance and periodic operations and safety improvements through the State Highway Operations Protection Program (SHOPP). There are a host of SHOPP maintenance and rehabilitation projects that are programmed for Route 145. They include

Asphalt Concrete (AC) overlays, shoulder widening, culvert rehabilitation, left turn phasing, upgrading signals, and bridge scour projects.

In the City of Kerman, pertinent issues that relate to Route 145 are as follows:

- Both the City's General Plan and Capital Improvement Plan call for widening of Route 145 to 4 lanes between Jensen and Church with 16' landscaped medians and traffic signals as warranted at both intersections.
- There may be a need to provide joint planning with the City of Kerman for long range planning of a truck route around the core of Kerman detouring through traffic from the Madera Avenue commercial area and Routes 145 and 180.
- In the future, there may be a need for improvements to the intersections of Route 145 with Shaw Avenue and Avenue 7. Both these streets are major routes from the west sides of Fresno and Madera counties to the northwestern sections of Fresno.

*See the following pages for Section VIII. Planned and Programmed Improvements to Route 145.*

## VIII. Planned and Programmed Improvements to Route 145

The following table shows both the planned and programmed projects for Route 145 over the next 25 years. The projects shown are capacity-increasing projects.

The table shows:

1. The specific segment.
2. Route 145 Planned Projects-the listing document (RTP, ITSP or STIP Candidate), description of the project, and projected completion date(s).
3. Route 145 Programmed Projects-the listing document (STIP), description of the project, and projected begin and complete construction dates.
4. Only Route 145 segments that have either planned and/or programmed projects.

Project scope and technical data are for general informational purposes only. If current information is needed, please verify with the Caltrans District 6 Office of Advance Planning at (559) 488-4162.		
Segment PM From/To	SR 145 Planned Projects	SR 145 Programmed Projects
7 FRESNO PM 35.1-40.1 Route 180 To Shaw Ave	<b>RTP:</b> FRE 145 PM 35.1/ 40.1 From Route 180 to Shaw Ave: 2-lane conventional highway to 4-lane conventional highway (Future).	There are no projects currently programmed for this segment
9 MADERA PM 0.0/7.0 Fresno/Madera County Line to Avenue 12	<b>RTP:</b> MAD 145 PM 0.0/7.0 From : Fresno/Madera County Line to Avenue 7: 2-lane conventional highway to 4-lane conventional highway (Future).	There are no projects currently programmed for this segment

11 MADERA PM 8.6 – 9.1 Almond Avenue to Avenue 13	<b>RTP:</b> MAD 145 PM 8.6/9.1 From : From Almond Avenue to Avenue 13: 2-lane conventional highway to 4-lane conventional highway (Future).	There are no projects currently programmed for this segment
12 MADERA PM 9.7 – 9.1 Yosemite Avenue to Route 99 GATEWAY (SR 145)	<b>RTP:</b> MAD 145 PM 9.7/9.1 * From : Yosemite Avenue to Route 99: 2-lane conventional highway to 4-lane conventional highway (Future).	There are no projects currently programmed for this segment
15 MADERA PM 10.2 – R12.6 Lake to Road 29	<b>RTP:</b> MAD 145 PM 10.2/R12.6 From Lake to Road 29 w/RR underpass: 2- lane conventional highway to 4-lane conventional highway (Future).	There are no projects currently programmed for this segment.

\* Note: This is the only future planned project that is fiscally constrained on this list.

	Pages
<b>Appendix</b>	
References .....	A-1
Glossary .....	A-2 - A-9
Intelligent Transportation Systems (I.T.S.) .....	A-10
Transit Services .....	A-11
Bicycle Facilities .....	A-12 - A-13
Pedestrian Facilities .....	A-14





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**Local Jurisdictions – MPOs:****Council of Fresno County Governments  
(COFCG)**

2100 Tulare Street, Suite 619  
Fresno, CA 93721  
(559) 233-4148

**Madera County Transportation  
Commission (MCTC)**

1816 Howard Rd, Suite #8  
Madera, CA 93637  
(559) 675-0721

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**Air Quality District:**

San Joaquin Valley Air Pollution Control  
District

1990 E. Gettysburg Avenue  
Fresno, CA 93726  
(559) 230-6000

**Air Basin:** San Joaquin Valley**Air Basin Determination:**

Severe non-attainment for ozone and serious  
For PM<sup>10</sup>. Contact the Air District for more  
information.

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**Transit Services:****Fresno County Rural Transit Agency  
(for Fresno County Rural Transit)**

2035 Tulare Street, Suite 201  
Fresno, CA 93721  
(559) 233-6789

**Madera County Transportation  
Commission  
(for Madera County Connection)**

1816 Howard Rd., Suite #8  
Madera, CA 93637  
(559) 675-0721

**City of Madera****(for Madera Area Express & Madera  
Dial-A-Ride)**

205 West 4<sup>th</sup> St  
Madera, CA 93637  
(559) 661-5400

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**Traffic Accident Data:**

Caltrans District 6  
Office of Traffic Investigations  
(559) 488-4123

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**Sources of Information - All Segments:**

Traffic Congestion Relief Program, 2000  
State Transportation Improvement Program  
(STIP), 2000, 2002, 2004  
State Highway Operations and Protection  
Program (SHOPP), 2000, 2002, 2004

Interregional Improvement Track-  
Interregional  
Road System Plan (ITSP), 1998, 2000  
Caltrans District 6 Bicycle Inventory, 2003  
Office of System Planning (559) 444-2500

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**Sources of Information - By County:****Fresno County:**

Fresno County General Plan, 2000  
Fresno County Regional Transportation Plan,  
2004

**Madera County:**

Madera County General Plan, 1995  
Madera County Regional Transportation Plan,  
2004



**AADT:** (Average Annual Daily Traffic). This designation indicates the total daily traffic that is counted at a particular location or within a particular highway segment and then averaged out over one calendar year.

**Access Control (or Controlled Access):** The condition where the ability to access a state highway by owners or occupants of abutting land is fully or partially controlled by public authority. Also, see Classification of Roads.

**Bicycle Facilities:** Bicycle facilities within the state are classified into four categories:

- **Class 1 Bikeways (Bike Paths):** Bike Paths are separate *off-highway* facilities for the exclusive use of bicyclists and with cross flow by motor vehicles minimized.
- **Class 2 Bikeways (Bike Lanes):** Bike Lanes are for preferential use by bicyclists and can be established within the paved area of state highways. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike lanes are separated from traffic lanes on California highways by the use of a painted 6" stripe on the pavement and are designated as bike lanes by the use of white R81 (Bike Lane), R-81A (Begin) and R81-B (End) "regulatory" signs. (MUTCD Chapter 9 - California Supplement - 2004).
- **Class 3 Bikeways (Bike Routes):** Bike Route are shared facilities which serve either to (a) provide continuity to other bike facilities (usually a Class 1 or Class 2 bikeway); or (b) to designate a preferred route through a high demand corridor. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike Routes are not separated from traffic lanes but are designated as bike routes through the use of green D11-1 (Bike Route), M4-11 (Begin) and M4-12 (End) "guide" signs. (MUTCD - Chapter 9 - 2003).
- **Shared Roadway (No Bikeway Designation):** Most bicycle travel on conventional state highways and local streets occurs on facilities without any bikeway designations, signs or striping. Virtually all highways in use by bicyclists for inter-city and recreational travel fall under this "share-the-road" scenario.

**CMS:** (Changeable Message Sign). A CMS is a full-matrix display sign used on State highways to provide motorists with an advanced warning of major highway incidents and route diversion information. CMSs are capable of displaying a variety of character heights and up to three lines of text. CMSs play increasingly important roles on State highways by improving operations and safety.

**Classification of Roads:**

- **Conventional (C):** A highway without access control, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations. Example: 2C = 2 lane conventional highway.
- **Expressway (E):** An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections. Example: 4E = 4 lane expressway (note: 2 lane expressways are not common).
- **Freeway (F):** A highway to which the owners of abutting lands have no right or easement of access to or from their abutting lands. Access is controlled or restricted to interchanges and with grade separation at all intersections. Example: 6F = 6 lane freeway.
- **Functional Classification:** Guided by Federal legislation, functional classification refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, e.g., Principal Arterial, Minor Arterial, Collector, Local, etc.

**Contract Phasing:**

- **Begin Construction:** This is the phase when the contract for construction is approved and construction begins.
- **Complete Construction:** This is the phase when the completion of the construction contract occurs.



**COG:** See RTPA

**CTC:** (California Transportation Commission). The California Transportation Commission (CTC) was established in 1978 by Assembly Bill 402 (Chapter 1106, Statutes of 1977) out of a growing concern for a single, unified California transportation policy. The Commission is responsible for the programming and allocating of funds for the construction of highway, passenger rail and transit improvements throughout California. The Commission also advises and assists the Secretary of Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The Commission is also an active participant in the initiation and development of State and Federal legislation that seeks to secure financial stability for the State's transportation needs.

**Density:** The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane. Also see **V/C**.

**Facility:**

- **Concept Facility:** A highway facility type and characteristic considered viable without improvement within the 25 year planning period given financial, environmental, planning and engineering factors.
- **Present Facility:** Highway type and general characteristics in place at the time of the development of a TCR.

**FTIP:** See Project Programming

**ICES:** (Intermodal Corridor of Economic Significance). Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

**ITMS:** (Intermodal Transportation Management System). A performance-based decision support system operating on a personal computer which allows "alternatives analysis" through the use of performance measures. ITMS incorporates intermodal system elements for freight and person movements using a spatial and attribute database thereby allowing management of transportation systems under existing and forecasted conditions. ITMS provides a new intermodal-planning tool using a common statewide data set for state and local transportation planners.

**ITS:** (Intelligent Transportation Systems). ITS refers to a wide variety of tools and techniques that focus on addressing transportation problems by improving the efficiency and safety of the existing transportation infrastructure. ITS works through the integration of high tech computing and information sharing.

**ITSP:** (Interregional Transportation Strategic Plan). The ITSP is a single document prepared by Caltrans to consolidate and communicate key elements of its ongoing long and short range planning. The ITSP serves as a counterpart to the Regional Transportation Plans (RTPs) prepared by the 43 Regional Transportation Planning Agencies (RTPAs) in California.

**KP:** (Kilo Post) See Post Mile

**Lifeline Routes:** See Route Designations

**LOS:** (Level of Service). Level of Service describes operating conditions a typical driver will experience on a typical day while driving on a particular facility. Like a report card, the LOS is defined in categories ranging from A-F. "A" represents the best traffic flow (low **v/c** ratio and delay, no impediments) through "F" representing the worse congestion (extremely high **v/c** ratio and delay, gridlock conditions).

**MIS:** (Major Investment Study). When the need for a major metropolitan transportation investment is identified and Federal funds are potentially involved, a major investment (corridor or sub-area) study is undertaken to develop or refine the plan. Upon completion, the MIS aids the area's Metropolitan Planning Organization (MPO), in cooperation with any participating agencies, on the design concept and scope of the investment.

**MPO:** See RTPA

**Multi-Modal:** Pertaining to the use of more than one mode of travel such as private vehicles, taxis, bicycles, mass-transit, para-transit, light and heavy rail, ferries, airplanes etc.

**NHS:** See Route Designation

**NTN:** See Route Designation

**Non-attainment (pertaining to air quality):** Identifies non-attainment status for CO (carbon monoxide), Ozone, and PM (particulate matter) within the subject air basin.

**Overcrossing:** (O/C) See Structures, Types of

**PM:** (MilePost Marker, Postmile or KP (Kilo Post). An 8" x 48" metal post marker along a State highway indicating a location using the postmile or designation. This is the distance in miles (or kilometers, in the case of Kilo Post measurements) that the given location is from the county line measuring from the south to the north or from the west to the east. Postmiles ascend in the northerly and easterly directions as determined by the route. The PM marker also includes an abbreviation for the County wherein its located (i.e., in Caltrans District 6: FRE = Fresno, KER = Kern, KIN = Kings, TUL = Tulare, MAD = Madera). As such, a PM marker located along SR 99 and displaying "MAD" and "6.25" would indicate that you are currently located in Madera County at a point 6.25 miles north of the Fresno/Madera County Line.

**PROJECT PROGRAMMING:** Separate programming documents prepared and adopted for somewhat different purposes, are required under State and Federal law. Transportation programming is the public decision making process that sets priorities and funds projects envisioned in long range transportation plans. It commits expected revenues over a multi-year period to transportation projects. Programming schedules high priority capital outlay projects for development and implementation. Programming documents include Federal, State, Regional and Metropolitan Transportation Plans, e.g., FTIP, ITIP, RTIP, SHOPP, STIP.

- **FTIP:** (Federal Transportation Improvement Program). To apply for federal highway funding a Federal statute requires MPOs to complete a Transportation Improvement Program. The MPO prepares the FTIP in cooperation with its member agencies (cities), its transit operators, State and Federal agencies, and with public involvement. The FTIP must by law be financially constrained and include a financial plan that demonstrates how projects can be implemented while the existing transportation system is being adequately operated and maintained. The FTIPs are in actuality a listing of planned Federally funded capital improvements to the regions' transit systems along with associated Federal operating assistance program and Federal Statewide Transportation Improvement Program (FSTIP).
- **ITIP:** (Interregional Transportation Improvement Program). The ITIP is Caltrans' equivalent to the RTIP (Regional Transportation Improvement Program) and consists of STIP projects funded from the Interregional Program share, which is 25% of new STIP funding. Caltrans' ITIP may nominate projects to the STIP only for the Interregional Program. The ITIP should be based on a Strategic Plan for implementing the Interregional Program. The ITIP should describe how proposed projects relate to the Strategic Plan and how the Strategic Plan would implement the California Transportation Commission's objectives. The ITIP includes both State highway and rail projects (potentially including mass transit guideway and grade separation projects).

- **PSR:** (Project Study Report). A pre-programming document required for project inclusion in the STIP.
- **PSSR:** (Project Scope Summary Report). An engineering report used to select candidate projects to be programmed in the State Highway Operation Protection Program (SHOPP). SHOPP funds are used primarily for rehabilitation, resurfacing and safety projects on State highways.
- **RTIP:** (Regional Transportation Improvement Program). After consulting with Caltrans, each Regional Transportation Planning Agency (RTPA) and/or County Transportation Commission (CTC) must prepare and submit an RTIP for regions with urbanized areas. Some urbanized RTPAs coincide with the Federal Metropolitan Planning Organizations (MPOs). Each regional agency is required to adopt and submit its RTIP to the CTC and to Caltrans. The CTC will utilize the RTIP to consider projects to be included in the State Transportation Improvement Program (STIP). The funds are available for a broad array of transportation improvement projects, including improving State highways, local roads, public transit, inter-city rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwalls, etc.
- **SAFETEA-LU:** Safe, Accountable, Flexible, Efficient Transportation Equity Act: On August 10, 2005, the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). With guaranteed funding for highways, highway safety, and public transportation totaling \$244.1 billion, SAFETEA-LU represents the largest surface transportation investment in our Nation's history. The two landmark bills that brought surface transportation into the 21<sup>st</sup> century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)—shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU builds on this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our vital transportation infrastructure.
- **SHOPP:** (State Highway Operation Protection Program). The SHOPP is a four-year program limited to projects related to State highway safety and rehabilitation. SHOPP funds are for major transportation capital improvements that are necessary to preserve and protect the State highway system. The SHOPP does not include projects that increase capacity. Most of the projects are for pavement rehabilitation, bridge rehabilitation, and traffic safety improvements. Other projects may include such things as operational improvements (e.g., traffic signalization) and roadside rest areas. Caltrans alone has full control of SHOPP funds.
- **STIP:** (State Transportation Improvement Program). Under California law, the STIP and SHOPP (State Highway Operations Protection Program) are the two primary documents through which the CTC commits and allocates funds to particular projects. In the year 2000 and thereafter, the STIP will be a four year plan with updates every two years. The STIP is a capital improvement program of transportation projects funded with revenues from the State Highway Account and other sources on and off the State highway system. The STIP includes a list of transportation projects, proposed in two broad programs, the regional program funded with 75% of new STIP funding and the interregional program funded from 25%. The STIP has two main funding components: the RIP (Regional Improvement Program), prepared by RTPAs and the IIP (Interregional Improvement Program) prepared by Caltrans.

**ROW:** (Right-of-Way). Denotes the *total* width allocated for a highway, including shoulders and adjacent land.

**RCR:** See TCR

**Route:** The California Legislature establishes the framework for the State Highway System by describing each state roadway in the Streets and Highway Code. This description establishes the official beginning and ending points of a state highway and in some cases intermediate control points.

**Route Adoptions:** Route Adoptions are needed for the following reasons: (1) any new alignment of an existing legislative route, (2) to establish the location of an unconstructed route, (3) to allow for the conversion of any conventional highway to a freeway or other form of controlled access route, (4) designating a traversable highway and (5) for any temporary alignments along an established state route. Route adoptions are approved by the CTC prior to submission to the FHWA for final approval.

**Route Designations:** Identifies whether or not the subject segment of a route is designated as being part of a system. Examples of systems include Freeway/Expressway System, Highways of Regional Significance, Interregional Highway System (IRRS), National Highway System (NHS), National Truck Network (NTN), and Terminal Access Route for the National Truck Network, Scenic Highway, or Strategic Highway Network (STRAHNET).

- **Freeway/Expressway System:** The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.
- **IRRS:** (Interregional Road System) Caltrans developed an Interregional Road System Plan that identified projects which will provide the most adequate interregional road system to all economic centers in the State. IRRS is a series of Interregional State highway routes, outside the urbanized areas, that provide access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions. Due to the high number of routes and capacity improvements needed on the IRRS, the most critical IRRS routes were identified as *High Emphasis Routes*. High Emphasis Routes are a priority for programming and construction and are critically important to interregional travel and the State as a whole. *Focus Routes* are a subset of the High Emphasis Routes. These routes represent 10 IRRS corridors that should be of the highest priority for completion to minimum facility standard in the 20 year period.
- **Lifeline Routes:** (Earthquake Emergency Response) A Lifeline Route is a route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open immediately following a major earthquake, or for which pre-planning for detour and/or expeditious repair and reopening can guarantee through-movement. The focus is on highly critical routes that allow for the immediate movement of emergency equipment and supplies into a region or through a region.
- **NHS:** (National Highway System) The purpose of the NHS is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities. Additionally, such highways meet National defense requirements and serve to facilitate interstate and interregional travel. The NHS consists of 155,000 miles, (plus or minus 15 percent), of the major roads in the U.S. Included in the NHS are all interstate routes, a large percentage of urban and rural principal arterial, the defense strategic highway network, and strategic highway connectors.
- **NTN:** (National Truck Network) A list of truck route segments and their truck access designations (such as National Network (NN), Terminal Access, California Legal, Advisory, or Restricted) with each segment's beginning and ending post miles, and beginning and ending cross streets.



- **Regionally Significant:** A transportation corridor that serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network. Such corridors, at minimum, would include all principal arterial highways and all fixed guideway transit facilities located within the region.
- **Scenic Highway:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. For a highway to be considered *Officially Designated* the local jurisdiction is required to develop and adopt protection measures in the form of ordinances to apply to the area of land within the scenic corridor. Additions and deletions to the list of highways eligible for scenic designation can only be made through legislative action.
- **STAA Truck:** In 1982, the Federal government passed the Surface Transportation Assistance Act (STAA). This act requires states to allow certain longer trucks on a network of Federal highways, referred to as the National Network (NN). A STAA truck is, in many cases, longer than a "California legal" truck, and may operate only on specific highways in California.
- **STRAHNET:** (Strategic Highway Corridor Network) STRAHNET is a National system of public highways that are key elements in U.S. strategic policy. This network provides defense access, continuity, and emergency capabilities for movements of personnel and equipment during both peace time and war. STRAHNET is comprised of about 61,000 miles of highway, including the 45,400-mile system of Interstate and Defense Highways and 15,600 miles of other important public highways. STRAHNET "connectors" (about 1,700 miles) are additional highway routes linking over 200 important military installations and ports to the STRAHNET. Generally, these "connector" routes end at the port boundary or installation gate and are typically used only when moving personnel and equipment during a mobilization or deployment
- **Terminal Access Route:** Terminal Access (TA) routes are portions of State or local highways that Caltrans or a local government granted access to STAA trucks. The purpose of TA routes is to allow STAA trucks (1) to travel between NN routes, (2) to reach a truck's operating facility, or (3) to reach a facility where freight originates, terminates, or is handled in the transportation process.

**Route Numbering:** South-north state and interstate routes normally carry odd number designations (e.g. I-5, SR 43, SR 99 etc.) while west-east routes normally carry even number designations (e.g. I-10, SR 58, SR 168 etc.).

**RTIP:** See Project Programming

**RTP:** (Regional Transportation Plan) The RTP is a comprehensive 20 year plan for the region, updated every four years by the regional transportation planning agency (RTPA). The RTP includes goals, objectives, and policies and recommends specific transportation improvements.

**RTPA:** (Regional Transportation Planning Agency) The RTPA is an association of city and county governments created to address regional transportation issues while protecting the integrity and autonomy of each jurisdiction. The RTPA serves as the forum for cooperative decision making by principal elected officials of general local government and is responsible for the preparation and adoption of a Regional Transportation Improvement Program (RTIP). There are 43 RTPAs in California. In smaller counties, usually the County Transportation Commission; in urban counties, usually the Metropolitan Planning Organization (MPO) is the RTPA. RTPAs produce the RTIPs for the approval of the California Transportation Commission (CTC).

- **MPOs and COGs:** RTPAs can be an MPO (Metropolitan Planning Organization) or a COG (Council of Governments) or all three. Some COGs also serve as MPOs, under Federal transportation rules, and this designation carries considerable power in allocating Federal and State funds for transportation projects. For example, Fresno COG is the MPO for Fresno County.

According to U.S. Code, an MPO is the organization designated by the governor and local elected officials as responsible, together with the State, for preparing a comprehensive transportation plan for both highway and transit modes, with long range (10 – 20 years) and shorter range (five year) elements in an urbanized area (population 50,000 or greater). The major role of the MPO is to foster inter-governmental communications and cooperation, undertake comprehensive regional planning with an emphasis on transportation, provide for citizen involvement in the planning process and provide technical services to the member agencies. MPOs are created by elected officials of counties and their incorporated cities as a means of providing a cooperative body for the discussion and resolution of issues that go beyond their individual boundaries.

State and Federal laws encourage such efforts. In each of these areas, MPOs act as a consensus-builder to develop an acceptable approach on how to handle problems that do not recognize jurisdictional boundaries.

**R/U:** (Rural *or* Urban location) Areas designated as rural are those lying outside the U.S. Census urban area boundary with a population less than 2,500 (less than 5,000 population for Federal Aid highway purposes). Areas designated as urban are those lying inside the U.S. Census urbanized boundary.

**Scenic Highway:** See Route Designation

**Separation:** See Structures, Types of

**SHOPP:** See Project Programming

**SR:** (State Route) Highways within the State which are distinctively designed to serve intrastate and interstate travel.

**STAA:** See Route Designation

**STIP:** See Project Programming

**STRAHNET:** See Route Designation

#### **STRUCTURES, Types of**

- **Overcrossing:** (O/C) A configuration where the State highway crosses below the grade of a local road.
- **Separation:** (Sep) A configuration where a State highway crosses over a State highway.
- **Undercrossing:** (U/C) A configuration where a State highway crosses above the grade of a local road.
- **Underpass:** A configuration where the State highway crosses below the grade of a railroad line.

**TCR:** (Transportation Concept Report) Formerly called a Route Concept Report or RCR, this document analyzes a transportation corridor service area, establishes a 20 year transportation planning concept, and identifies modal transportation options and applications needed to achieve the 20 year concepts.

**TCRP:** (Traffic Congestion Relief Program) The TCRP was enacted as part of AB 2928 (2000). Through the TCRP, the Governor and Legislature allocated \$4.9 billion for projects to relieve congestion, provide safe and efficient movement of goods, improve intermodal connectivity, and make further investments in transit and rail facilities within the State.

**Undercrossing:** See Structures, Types of

**Underpass:** See Structures, Types of

**UTC:** (Ultimate Transportation Corridor) Highest predictable build-out beyond 20 years.

**V/C:** (Volume/Capacity ratio) A ratio of demand flow rate (volume) to capacity for a traffic facility. Also see Density.

## Intelligent Transportation Systems

Existing and Proposed

April 2005

For more information, contact the Central Valley Transportation  
Management Center at (559) 488-4163

### Changeable Message Sign Locations (CMS)

Existing and Proposed

Status January 2006

EXISTING CHANGEABLE MESSAGE SIGNS					
Element Type	County	Route	Post Mile	Location	Status
D6CMS	FRE	145	1.69	N OF I5	Existing
PROPOSED CHANGEABLE MESSAGE SIGNS					
Element Type	County	Route	Post Mile	Location	Status
D6CMS	FRE	145	11.47	S OF RTE 145/269 JCT	Proposed
D6CMS	FRE	145	14.10	N OR RTE 269	Proposed
D6CMS	FRE	145	33.69	S OF RTE 180	Proposed
D6CMS	FRE	145	36.41	N OF RTE 180	Proposed
D6CMS	MAD	145	7.59	S OF RTE 99	Proposed
D6CMS	MAD	145	11.78	N OF RTE 99	Proposed
D6CMS	MAD	145	15.4	N OF EL CAMINO RD	Proposed
D6CMS	MAD	145	24.04	S OF RTE 41	Proposed

### Highway Advisory Radio Locations (HAR)

Existing and Proposed

Status January 2006

EXISTING HIGHWAY ADVISORY RADIOS					
Element Type	County	Route	Post Mile	Location	Status
D6HAR	FRE	145			None
D6HAR	MAD	145			None
PROPOSED HIGHWAY ADVISORY RADIOS					
Element Type	County	Route	Post Mile	Location	Status
D6HAR	FRE	145	13.21	RTE 145/RTE 269	Proposed
D6HAR	FRE	145	35.15	RTE 145/RTE 180	Proposed
D6HAR	MAD	145			None Proposed

### 511 System

A new three-digit phone number program to access travel information that is currently being implemented throughout various areas of the country. Caltrans' Reverse Commute Study/Special Studies Branch is working with Traffic Operations and Caltrans' Districts to develop a "California 511 Strategic Development Plan for Rural and Inter-Regional Traveler Information System" to meet the traveler's highway and transit information needs. When fully implemented, 511 will be an easy to remember telephone number.

## TRANSIT SERVICES

Segment (s) PM From / To	Segment Details
1 Fresno County PM 0.00 - 13.20 Jct I-5 (Begin Route) to Jct SR 269	Transit services within this segment are provided by the Fresno County Rural Transit Agency's (FCRTA) Coalinga Transit Route which uses the portion of this segment between Butte Avenue PM 8.92 and Five Points/Mt. Whitney Avenue (PM 13.20). Transit services are provided Monday - Friday, 8:00 AM to 5:00 PM. No services are currently provided on the weekends or designated holidays.
2-4 Fresno County PM 13.20 - 30.10 Jct SR 269 to American Ave	No urban or rural transit services of any type are currently provided within these segments of Route 145.
5-6 Fresno County PM 30.10 - 35.10 American Ave to Jct SR 180	Transit services within these two segments are provided by the Fresno County Rural Transit Agency's (FCRTA) San Joaquin Transit Route which uses this route between American Avenue and Route 180. Transit services are provided Monday - Friday, 8:00 AM to 5:00 PM. No services are currently provided on the weekends or designated holidays. Kerman Transit also operates a dial-a-ride service within the city of Kerman that may, as needed, use a portion of this route while providing its local transit services.
7-8 Fresno County PM 35.10 - R41.3 Jct SR 180 to Fresno/Madera County Line	No urban or rural transit services of any type are currently provided within these two segments.
9-10 Madera County PM 0.00 - 8.10 Fresno/Madera County Line to Avenue 13	No urban or rural transit services of any type are currently provided within these two segments.
11-14 Madera County PM 8.10 - 11.00 Avenue 13 to Tozer Avenue	Within these four segments transit services are provided via a combination of the Madera Area Express (MAX), the Madera County Connection (MCC) and Madera's Dial-a-Ride (DAR) service. Within the City of Madera MAX uses portions of Route 145 (i.e. Madera and Yosemite Avenues within Segments 11, 12, 13 and 14) with transit services provided weekdays from 7:00 AM - 6:30 PM and Saturday from 9:00 AM to 4:00 PM. MCC uses Route 145 from the city's transit center to Tozer Monday through Friday and Madera's DAR uses Route 145 in and around the city of Madera area as needed for its dial-a-ride services. DAR offers dial-a-ride services weekdays from 7:00 AM to 6:30 PM, Saturday from 9:00 AM to 4:00 PM and Sunday from 8:30 AM to 2:30 PM.
15-16 Madera County PM 11.00 - 25.50 Tozer Avenue to Jct SR 41 (End of Route)	Within these segments only The Madera County Connection (MCC) uses this route between Tozer Avenue and the Route's end at Route 41. The MCC then uses SR 41 in providing services to the communities of Coarsegold, Oakhurst and Bass Lake in northern Madera County.



BICYCLE FACILITIES <sup>(1) (2)</sup>

Segment (s) PM From / To	Segment Details
1 Fresno County PM 0.00 - 13.20 Jct I-5 (Begin Route) to Jct SR 269	Two lane conventional state highway - <u>open to bicycle travel</u> . Rolling terrain at beginning changing to level terrain - rural setting. <i>Shoulder width under 2' till California Aqueduct (PM 3.07) then 3' for remainder.</i> <sup>(3)(4)</sup> No direct alternate route currently exists for this segment.  <u>Designation:</u> Conventional state highway open to bicycle travel. The Fresno County's General Plan - Part 3 - "Transportation and Circulation Element," lists all portions of this segment as an "Existing or Planned Bikeway".
2-5 Fresno County PM 13.20 - 33.60 Jct SR-269 to Church Ave	Two lane conventional state highway - <u>open to bicycle travel</u> . Level terrain - rural setting. <i>Shoulder width 8' until Madera Ave (PM 25.10) then 0' to Lincoln Ave (PM 29.11) then back to 8' to end of Segment 5.</i> <sup>(3)(4)</sup> No alternate route currently exists for this segment.  <u>Designation:</u> Conventional state highway open to bicycle travel. The Fresno County's General Plan - Part 3 - "Transportation and Circulation Element," lists all portions of these four segments as an "Existing or Planned Bikeway."
6 Fresno County PM 33.60 - 35.10 Church Ave to Jct SR 180	Four lane divided conventional state highway - <u>open to bicycle travel</u> . Level terrain - urban setting. <i>Shoulder width 6.</i> <sup>(3)(4)</sup> No alternate route currently exists for this segment.  <u>Designation:</u> Conventional state highway open to bicycle travel. Additionally, the Fresno County's General Plan - Part 3 - "Transportation and Circulation Element," lists all portions of this segment as an "Existing or Planned Bikeway."
7-8 Fresno County PM 35.10 - R41.30 Jct 180 to Fresno/Madera County Line	Two lane conventional state highway - <u>open to bicycle travel</u> . Level terrain - rural setting. <i>Shoulder width 0' until Shaw Ave (PM 40.16) then 8' to the County Line.</i> <sup>(3)(4)</sup> No alternate route currently exists for these two segments.  <u>Designation:</u> Conventional state highway open to bicycle travel. Additionally, the Fresno County's General Plan - Part 3 - "Transportation and Circulation Element," lists both of these segments as a "Existing or Planned Bikeway."
9 Madera County PM R0.00 - 7.10 Fresno/Madera County Line to Avenue 12	Two lane conventional state highway - <u>open to bicycle travel</u> . Level terrain - rural setting. <i>Shoulder width 8' until Avenue 6 (PM R1.00) then 0' to Avenue 12.</i> <sup>(3)(4)</sup> No alternate route currently exists for this segment.  <u>Designation:</u> Conventional state highway open to bicycle travel. The 2004 Madera County Regional Bicycle Transportation Plan lists all segments of Route 145 as a "Road of Regional Significance" where upon the ".... county is committed to upgrading the facilities as road reconstruction projects provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders .... makes it practical to do so."
10 Madera County PM 7.10 - 8.10 Avenue 12 to Avenue 13	Two lane conventional state highway - <u>open to bicycle travel</u> . Level terrain - rural setting. <i>Shoulder width 8'.</i> <sup>(3)(4)</sup> No alternate route currently exists for this segment.  <u>Designation:</u> Conventional state highway open to bicycle travel. The 2004 Madera County Regional Bicycle Transportation Plan lists all segments of Route 145 as a "Road of Regional Significance" where upon the ".... county is committed to upgrading the facilities as road reconstruction projects provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders .... makes it practical to do so."

<p>11-13 Madera County PM 8.10 - 10.70 Avenue 13 to Fig Avenue</p>	<p>Two and four lane divided conventional state highway - <u>open to bicycle travel</u>. Level terrain - urban setting. <i>Shoulder width varies from 3 to 8' depending on location</i>. Alternate route(s) currently exists for these segments except where this route crosses SR 99.<sup>(3)(4)</sup></p> <p><u>Designation:</u> Conventional divided state highway open to bicycle travel. The 2004 Madera County Regional Bicycle Transportation Plan lists all segments of Route 145 as a "Road of Regional Significance" where upon the "...county is committed to upgrading the facilities as road reconstruction projects provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders .... makes it practical to do so."</p>
<p>14 Madera County PM 10.70 - 11.00 Fig Avenue to Tozer Street</p>	<p>Two lane conventional state highway - <u>open to bicycle travel</u>. Level terrain - urban setting. <i>Existing Class 2 bike lane already exists in eastbound lanes - westbound lanes shoulder width 6'</i>. Alternate route(s) currently exists for this segment.<sup>(3)(4)</sup></p> <p><u>Designation:</u> Conventional state highway open to bicycle travel. The 2004 Madera County Regional Bicycle Transportation Plan lists all segments of Route 145 as a "Road of Regional Significance" where upon the "...county is committed to upgrading the facilities as road reconstruction projects provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders .... makes it practical to do so."</p>
<p>15-16 Madera County PM 11.00 - 25.5 Tozer Street to Route 145 (End of Route)</p>	<p>Two lane conventional state highway - <u>open to bicycle travel</u>. Level to rolling terrain - rural setting. <i>Shoulder width 0'</i>. No direct alternate route currently exists for these segments.<sup>(3)(4)</sup></p> <p><u>Designation:</u> Conventional state highway open to bicycle travel. The 2004 Madera County Regional Bicycle Transportation Plan lists all segments of Route 145 as a "Road of Regional Significance" where upon the "...county is committed to upgrading the facilities as road reconstruction projects provide the required 4' shoulder for Class 2 bikeways. The county intends to sign and stripe such facilities as Class 2 [bikeways] as the continuity of shoulders .... makes it practical to do so."</p>

<sup>(1)</sup> **Deputy Directive 64 (DD-64) - "Policy** - The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products."

<sup>(2)</sup> **PDPM - Chapter 31** (Non-motorized Transportation Facilities ) Section 1 - General - Introduction - "... State and federal laws require Caltrans to promote and facilitate increased use of non-motorized transportation. The purpose of this chapter is to outline pertinent statutory requirements, planning policies, and implementing procedures regarding non-motorized transportation facilities."

<sup>(3)</sup> **Streets and Highway Code - Section 888** - "The department (i.e. Caltrans) shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for non-motorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient alternate route, or unless such a route already exists."

<sup>(3)</sup> **California Vehicle Code - Section 21960 (Bikes & Pedestrians on Freeways)** "(a) The Department of Transportation and local authorities [i.e. acting together - not separately], [may] by order, ordinance, or resolution, with respect to freeways, expressways ... prohibit or restrict the use of the freeways, expressways, or any portion thereof by pedestrians, bicycles or other non-motorized traffic..."

Pedestrian Access / Facilities <sup>(1)</sup> <sup>(2)</sup>

Segment (s) PM From / To	Segment Details
1-8 Fresno County PM 0.00 - 41.30 Jct I-5 to Fresno/Madera County Line	Within Fresno County pedestrian and ADA concerns are to be found primarily within the community of Kerman (Segments 6 and portions of Segment 7). Within this area are to be found moderate concentrations of residential, retail and commercial properties adjacent this Route's right-of-way. The remainder of this route is very rural with few, if any, pedestrian or ADA concerns at the present time. However, should any projects be constructed within any of these segments pedestrian and ADA concerns such as the addition of crosswalks, sidewalks, curb cuts, ramps, railings etc., may need to be addressed.
9-16 Madera County PM 0.00 - 25.5 Fresno/Madera County Line To Jct SR 41	Within Madera County pedestrian and ADA concerns will be found primarily within the community of Madera (Segments 10-14). Within this area will to be found large concentrations of residential, retail and commercial properties on or adjacent to this route's right-of-way. The remainder of this route is very rural with few, if any, pedestrian or ADA concerns at the present time. However, should any projects be constructed within any of these segments pedestrian and ADA concerns such as the addition of crosswalks, sidewalks, curb cuts, ramps, railings etc., may need to be addressed. The park and ride lot currently located at this route's terminus (Jct Route 41) could also be an area of future pedestrian and ADA concerns.

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